

AMENDMENTS TO THE CLAIMS:

Please cancel claims 3 and 4 without prejudice. Kindly amend claims 1, 2, 5 and 6 and add new claims 7-10 as follows.

The following listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method of build up welding to a thin-walled portion of a workpiece, comprising;

a jig-mounting step (A) for installing a jig to the thin-walled portion of the workpiece to form a recess, wherein the jig is manufactured from a material with a higher ~~meltingheat-resisting~~ temperature than the ~~meltingheat-resisting~~ temperature of the molten metal and a ~~satisfactorily large~~ heat capacity sufficient to reduce a cooling rate of the thin-walled portion after build-up welding, wherein the jig comprises a plurality of closely fitting segments shaped to make close contact with the thin-walled portion of the workpiece, and an outer-frame segment that encloses and holds the plurality of the closely fitting segments in an integrated manner, and wherein the recess is to store the molten metal in a surfaced portion in the vicinity of the thin-walled portion of the workpiece;

a preheating step (B) for preheating the workpiece and the jig to a predetermined temperature under the condition with the jig installed to the thin-walled portion of the workpiece;

a build up welding step (C) for continually build up welding to the thin-walled portion of the workpiece and forming weld beads on a surfaced portion; and

a jig-removing step (D) for removing the jig after the weld beads solidify completely.

2. (Currently amended) The method of build up welding to ~~at~~the thin-walled portion of a workpiece, specified in Claim 1, wherein the jig manufactured from the material with a ~~satisfactorily large~~ heat capacity sufficient to reduce a cooling rate of the thin-walled portion after build-up welding comprises a ceramic jig.

3. (Canceled)

4. (Canceled)

5. (Currently amended) The method of build up welding to ~~at~~the thin-walled portion of a workpiece, specified in Claim 1, wherein the material of the workpiece is a TiAl alloy.

6. (Currently amended) The method of build up welding to ~~at~~the thin-walled portion of a workpiece, specified in Claim 1, wherein the thin-walled portion of the workpiece is the tip of a turbine blade.

7. (NEW) A method of build up welding to a thin-walled portion of a workpiece, comprising the steps of:

(A) installing a jig to a thin-walled portion of a workpiece to form a recess, wherein the jig is manufactured from a material with a higher melting temperature than the melting temperature of a first molten metal and a heat capacity sufficient to reduce a cooling rate of the thin-walled portion after build-up welding, wherein the jig comprises a

plurality of closely fitting segments shaped to make close contact with the thin-walled portion of the workpiece, and an outer-frame segment that encloses and holds the plurality of the closely fitting segments in an integrated manner, and wherein the recess is for storing the first molten metal in a surfaced portion in the vicinity of the thin-walled portion of the workpiece;

(B) preheating the workpiece and the jig to a predetermined temperature under the condition with the jig installed to the thin-walled portion of the workpiece;

(C) build up welding continuously to the thin-walled portion of the workpiece and forming weld beads on a surfaced portion; and

(D) removing the jig after the weld beads solidify completely.

8. (NEW) The method as specified in Claim 1, wherein the jig comprises a ceramic jig.

9. (NEW) The method as specified in Claim 1, wherein the material of the workpiece is a TiAl alloy.

10. (NEW) The method as specified in Claim 1, wherein the thin-walled portion of the workpiece is the tip of a turbine blade.